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ABSTRACT

This guide was developed by the Albany area schools in recognition of the different needs, learning rates, and abilities of students. Three major areas of mathematics (computational skills and concepts, problem solving, and measurement) are included. A master list of competencies and performance indicators is given, as well as a list of competencies and performance indicators appropriate for each grade level (1-6). Each performance indicator has a skill level (introduce, develop, or master) indicated. (MK)

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LB IED

MATH ARTICULATION MANUAL

albany area schools

SE 030 102

M A T H

A R T I C U L A T I O N

M A N U A L

Albany Area Schools

In accordance with Oregon Administrative Rule #22-030, this program is submitted as the first phase of the Mathematics Curriculum Articulation for that area of the curriculum.

Albany Elementary Schools District No. 5
Albany Union High Schools District No. 8
Clover Ridge School
Crabtree School
Dever School
Fairmount School
Fir Grove School
Grand Prairie School
Knox Butte School
McFarland School
Millersburg Grade School
North Albany Elementary School
Oak Creek School
Oak Grove School
Price School
Tangent School

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Albany, Oregon

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We recognize that mathematics is based on a hierarchy of skills: not all students are capable of learning the same skill at the same time. This guide is developed by the Albany area schools in recognition of the different needs, learning rates, and abilities of students. The students will know and apply basic computational skills to solve problems, perform measurements, and develop the mathematical concepts necessary for successful living in the six life roles.

Three major areas of mathematics are included in the guide.

1. MC - Computational Skills and Concepts
2. MP - Problem Solving
3. MM - Measurement

The guide is divided into two major sections.

1. A master list of competencies and performance indicators.
2. A list of the competencies and performance indicators appropriate for each grade level (1-6).

The letters I, D, or M denote a skill level for each performance indicator.

I - Introduce
D - Develop
M - Master

Example: The performance indicator MC2.1.10 state the student will add 10 problems with thousands (2685 + 3421). This type of problem (and place value concept) would be introduced (I) at the second grade level, developed (D) during the third grade, and mastered (M) by the end of the fourth grade.

(80% accuracy is expected for mastery unless otherwise stated)

After a competency has been mastered, review and use of the skill or knowledge developed must be continued. The information in this guide does not cover this important aspect of student progress and development.

Following certain sections of performance indicators, the student is asked to demonstrate understanding by solving a self-devised problem. The following statements of activities may be used as a guide for the various skill levels.

I - show the process step by step
D - explain the process
M - analyze and/or interpret the process

Example: Addition of two digit numbers (23 + 38)

I - calculate the sum
D - "add the numbers in the ones position (11) and carry one ten to the tens position - then add the numbers in the tens position."
M - "The numbers may be broken down as follows

2(10) + 3(1) and 3(10) + 8(1)

adding tens and ones we get 5(10) + 11(1)
the sum is 50 + 11 = 61."

It has been suggested that individual teachers may want to color code the competencies and performance indicators withing their grade level section. This perhaps, would facilitate the teacher's work of determining the material to be introduced, developed, or mastered at that grade level.

GOAL COMPETENCY	PERFORMANCE INDICATOR		GRADE LEVEL					
			K-1	2	3	4	5	6
MC1.0 NUMERATION	The student will							
MC1.1 Count sequentially	MC1.1.1	count to 10	I/M					
	MC1.1.2	select a given number of objects (up to 10) from a set of objects	I/M					
	MC1.1.3	correctly read numerals from 1 to 10	I/M					
	MC1.1.4	count orally to 25	I/M					
	MC1.1.5	write numerals to 25	I/M					
	MC1.1.6	count orally to 100	I/M					
	MC1.1.7	write numerals to 100	I/D	M				
MC1.2 Skip count by 10's, 5's, 2's	MC1.2.1	orally count by 10's to 100	I/M					
	MC1.2.2	orally count by 5's to 25	I/D	M				
	MC1.2.3	write to 100 by 10's	I/D	M				
	MC1.2.5	count orally by 2's to 50	I/D	M				
	MC1.2.6	count orally by 2's to 100	I	D	M			
MC1.3 Odd/even numbers	MC1.3.1	tell if a given number (1-100) is odd or even	I	D	M			
MC1.4 Ordinal numbers	MC1.4.1	identify first through fifth place from a given set of objects or pictures	I/M					
MC1.5 Roman numerals	MC1.5.1	read and write standard Roman numerals (I V X L C M0				I	D	M
MC1.6 Symbols	MC1.6.1	identify (orally and written) the symbols of arithmetic (+ - x ÷ = ≠)	I	D	D	D	M	
	MC1.6.2	demonstrate the use of each symbol in a self-devised problem	I	D	D	D	M	
MC1.7 Sets	MC1.7.1	match objects using 1 to 1 correspondence	I/M					
	MC1.7.2	identify the members of a set	I	D	D	D	M	
	MC1.7.3	identify null, finite and infinite sets	I	D	D	D	M	
	MC1.7.4	identify subsets	I	D	D	D	M	

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MC2.0 OPERATIONS	The student will complete						
MC2.1 Addition	MC2.1.1 10 problems using number pairs with sums 10 or less (3+4)	I/M					
	The student will compute						
	MC2.1.2 10 basic fact problems with sums 18 or less (9+6)	I/D	M				
	MC2.1.3 100 basic facts within 10 minutes (100% accuracy)	I	D	M			
	MC2.1.4 10 problems of 3 single digit numerals (4+6+2)	I/D	M				
	MC2.1.5 10 problems with tens without regrouping (25+33)	I/D	M				
	MC2.1.6 10 problems with hundreds without regrouping (245+312).	I/D	M				
	MC2.1.7 10 problems with tens with regrouping (26+35)		I/D	M			
	MC2.1.8 10 problems with hundreds with regrouping (268+493)		I	D/M			
	MC2.1.9 10 problems in column form using hundreds (246+357+468)		I	D/M			
	MC2.1.10 10 problems with thousands (2685+3421)		I	D	M		
	After completing each of the above indicators, the student will demonstrate understanding of addition by means of solving a self-devised problem. (At appropriate skill level-I/D/M)						
	After completing each of the above indicators, the student will explain regrouping in terms of place value. (At appropriate skill level-I/D/M)						
MC2.2 Subtraction	MC2.2.1 10 problems with differences 10 or less (9-4)	I/D	M				
	MC2.2.2 the 100 basic facts in 10 minutes (100% accuracy)		I	D	M		
	MC2.2.3 100 basic facts in 5 minutes (100% accuracy)		I	D	D	M	
	MC2.2.4 10 problems with tens without regrouping (36-21)	I					
	MC2.2.5 10 problems with hundreds without regrouping (387-243)	I	D/M				
	MC2.2.6 10 problems with tens with regrouping (24-16)	I	D	M			
	MC2.2.7 10 problems with hundreds with regrouping (465-396)		I	D	M		
	MC2.2.8 10 problems with thousands with regrouping (3527-1649)		I	D	M		
	After completing each of the above indicators, the student will demonstrate understanding of subtraction by means of solving a self-devised problem. (At appropriate skill level-I/D/M)						

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MC2.3 Multiplication	The student will compute						
	MC2.3.1 basic facts through 5 in 5 minutes (100% accuracy)		I/D	M			
	MC2.3.2 basic facts through 9 in 10 minutes (100% accuracy)		I	D	M		
	MC2.3.3 basic facts through 9 in 5 minutes (100% accuracy)		I	D	D	M	
	MC2.3.4 10 problems of ones times tens (5 x 36)			I/D	M		
	MC2.3.5 10 problems of ones times hundreds (4 x 394)			I	D	M	
	MC2.3.6 10 problems with tens times ten (26 x 53)				I	D/M	
	MC2.3.7 10 problems with tens times hundreds (26 x 487)				I	D	M
	MC2.3.8 10 problems of hundreds times hundreds (266 x 394)				I	D	M
	After completing each of the above indicators, the student will demonstrate understanding of multiplication by means of solving a self-devised problem. (At appropriate skill level-I/D/M)						
MC2.4 Division	MC2.4.1 90 basic facts in 10 minutes (100% accuracy)			I	D	M	
	MC2.4.2 10 problems with tens/ones without remainders (36/2)			I	D	M	
	MC2.4.3 10 problems with tens/ones with remainders (55/6)			I	D	M	
	MC2.4.4 10 problems with hundreds/ones without remainders (368/4)			I	D	M	
	MC2.4.5 10 problems with hundreds/ones with remainders (562/5)			I	D	M	
	MC2.4.6 10 problems with hundreds/tens without remainders (360/24)				I	D	M
	MC2.4.7 10 problems with hundreds/tens with remainders (485/26)				I	D	M
	MC2.4.8 10 problems with thousands/tens (3695/25)				I	D	M
	MC2.4.9 10 problems with thousands/hundreds (4829/256)					I	D
	MC2.4.10 10 problems where divisor is a whole number and dividend a decimal number (256.32/21)						I
	MC2.4.11 10 problems expressing the remainders as fractions (25/4=6 1/4)					I	D/I
	After completing each of the above indicators, the student will demonstrate understanding of division by means of solving a self-devised problem. (At appropriate skill level-I/D/M)						

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MC3.0 NUMBER THEORY	The student will identify and list						
MC3.1 Common multiples	MC3.1.1 common multiples when given two or more sets of multiples					I	D
MC3.2 Least common multiple	MC3.2.1 the least common multiple of any two integers less than 100					I	D
MC3.3 Factors	MC3.3.1 80% of the factors in each of 10 composit numbers					I	D
	MC3.3.2 all factors of a given number less than 50					I	D
MC3.4 Common factors	MC3.4.1 80% of the common factors in each of 10 pairs of composite numbers					I	D
MC3.5 Greatest common factor	MC3.5.1 the greatest common factor of any two integers less than 100					I	D
MC3.6 Prime factors	MC3.6.1 the 10 prime numbers from a list of 20 numbers, ten of which are prime					I	D
	MC3.6.2 prime and composite numbers from a given list of numbers					I	D
MC3.7 Complete factorization	MC3.7.1 factor trees grom a given list of ten numbers					I	D
MC4.0 FRACTIONS	The student will						
MC4.1 Fractional parts	MC4.1.1 identify simple fractions (1/4, 1/3, 1/2, 1/5, 2/3, 3/4, 2/4) when shown representative shapes (100% accuracy)	I	D	M			
	MC4.1.2 identify the fractional part indicated from a given set of objects			I/M			
MC4.2 Numerators and denominators	MC4.2.1 identify the numerator in each of 10 given fractions			I/M			
	MC4.2.2 identify the denominator in each of 10 given fractions			I/M			
MC4.3 Equivalent fractions	MC4.3.1 identify the relationship of 10 pairs of fractions by using the symbols =, < , >				I	D	D
MC4.4 Simplest form of fractions	MC4.4.1 reduce 10 pairs of proper fractions to simplest terms				I	D	D

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MC4.5 Common denominator	MC4.5.1 find the common denominator for each pair of 10 given pairs of fractions with unlike denominators					I	D
MC4.6 Mixed numbers and improper fractions	MC4.6.1 change 10 pairs of mixed numbers to improper fractions					I	D
	MC4.6.2 change 10 pairs of improper fractions to mixed numbers					I	D
MC4.7 Addition of fractions	MC4.7.1 add 10 pairs of fractions with common denominators			I/D	M		
	MC4.7.2 add 10 pairs of fractions with unlike denominators				I	D	M
	MC4.7.3 add 10 pairs of fractions presented as mixed numerals				I	D	M
MC4.8 Subtraction of fractions	MC4.8.1 subtract 10 pairs of fractions with common denominators			I	D	M	
	MC4.8.2 subtract 10 pairs of fractions with unlike denominators				I	D	M
	MC4.8.3 subtract 10 pairs of fractions presented as mixed numerals					I/D	M
MC4.9 Multiplication of fractions	The student will						
	MC4.9.1 multiply 10 pairs of proper fractions (2/3 x 1/4)						I
	MC4.9.2 multiply 10 pairs of mixed numerals (2 1/4 x 3 1/5)						I
MC4.10 Division of fractions	MC4.10.1 divide 10 pairs of proper fractions (1/2 ÷ 1/4)						I
	After completing each of the above indicators, the student will demonstrate the operations with fractions in a problem devised by the student. (At appropriate skill level-I/D/M)						
MC5.0 PLACE VALUE AND DECIMAL NUMBERS							
MC5.1 Place value to ten	MC5.1.1 identify the number of tens and ones in 10 two digit numbers (23 = 2 tens and 3 ones)	I	D	M			
	MC5.1.2 write the numeral for 10 numbers given the number of tens and ones in each number (3 tens and 5 ones = 35)	I	D	M			
MC5.2 Place value to 100	MC5.2.1 identify the number of hundreds, tens, and ones in 10 three digit numbers (312 = 3 hundreds, 1 ten, 2 ones)		I	D	M		
	MC5.2.2 write the numeral representing 10 numbers given the number of hundreds, tens and ones (2 hundreds, 5 tens, 8 ones = 258)		I	D	M		

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MC5.3 Place value to 100,000	MC5.3.1 identify place value and write numeral to the 100,000			I	D	M	
MC5.4 Place value (tenths, hundredths, thousandths...)	MC5.4.1 identify the number of tenths and hundredths in 10 decimal numbers (.37 = 3 tenths, 7 hundredths)			I	D	M	
	MC5.4.2 write the decimal number for 10 numbers given the number of tenths and hundredths (8 tenths, 5 hundredths = .85)				I	D	M
	MC5.4.3 read 10 decimal numbers (.5, 126, .31, .7029)					I	D
	MC5.4.4 write 10 decimal numbers presented orally					I	D
MC5.5 Rounding	MC5.5.1 round 10 whole numbers less than 100 to the nearest 10 (87 to 90)		I	D	M		
	MC5.5.2 round 10 whole numbers less than 1000 to the nearest 10 and the nearest 100 (782 - 780, 800)			I	D	M	
	MC5.5.3 round 10 whole numbers greater than 1000 to the nearest 10, 100, 1000, 10000 (2372 - 2370, 2400,2000)				I	D	M
	MC5.5.4 round 10 decimal numbers involving tenths to the nearest integer (.7 to 1, 2.6 to 3)				I	D	M
	MC5.5.5 round 10 decimal numbers (involving hundredths) to the tenth (.76 to .80)				I	D	M
	MC5.5.6 round 10 decimals less than .9 to the nearest tenth, hundredth, thousandth (.372 to .4, .37, .370)					I	D
MC5.6 Decimals and fractions	MC5.6.1 convert 10 fractions (denominators in power of 10) to equivalent decimal (1/10 to .1; 3/100 to .03...)				I	D	M
	MC5.6.2 change 10 simple fractions to decimal form (1/2, 2/5, 1/3, 3/4)				I	D	M
	MC5.6.3 change 10 fractions to decimal form (7/8, 15/16, 5/9)						D
	MC5.6.4 convert 10 decimals (using tenths and hundredths) to fractional form (.1 to 1/10; .25 to 25/100 to 1/4)				I	D	M
MC5.7 Operations - power of 10	MC5.7.1 multiply and divide 10 numbers by 10, 100, 1000 (3 x 10; 3 x 100; 3 x 1000; 8.21 x 10; 8.21 x 100 etc.)				I	D	M
	MC5.7.2 multiply and divide 10 numbers by .1, .01, .001					I	D

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MC5.8 Basic operations	The student will compute						
	MC5.8.1 10 addition problems using decimals to thousandths					I	D
	MC5.8.2 10 subtraction problems using decimals to thousandths					I	D
	MC5.8.3 10 multiplication problems using decimals to thousandths					I	D
	MC5.8.4 10 division problems using decimals to thousandths					I	D
	MC5.8.5 10 money problems involving the basic operations					I	D
	After completing the above indicators, the student will demonstrate the operations with decimals in a self-devised problem. (At appropriate skill level-I/D/M)						
MC6.0 PERCENTAGES	The student will						
MC6.1 Percentage symbol	MC6.1.1 identify the percentage symbol from a given list of 10 values (50, 45%, 20, 20%, 89%, 53...)						I
	MC6.1.2 write the % symbol when orally given 10 statements, involving the symbol (thirty-three percent, 33%)						I
MC6.2 Decimals and fractions to percentages	MC6.2.1 change each of 10 fractions to percentages						I
	MC6.2.2 change each of 10 decimals to percentages						I
	After completing each of the above indicators, the student will demonstrate the operations with percentages in a self-devised problem. (At appropriate skill level-I/D/M						
MC7.0 STATISTICAL PROBLEMS							
MC7.1	MC7.1.1 compute the average of five 2 digit whole numbers (24+35+46+37+34)/5						I
	MC7.1.2 demonstrate the meaning of average by computing the results of a self-devised problem and interpreting the process and/or result.						I
MC8.0 NUMBER PRINCIPLES	The student will						
MC8.1 Commutative property	MC8.1.1 rewrite 5 simple addition equations by applying the commutative property (3 + 8 = 8 + 3)			I	D	D	D
	MC8.1.2 rewrite 5 simple equations involving multiplication by using the commutative property (8 x 4 = 4 x 8)			I	D	D	D

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MC8.2 Associative property	MC8.2.1 rewrite 5 simple addition equations (with more than two addends) by applying the associative property (3+5)+2=3+(5+2)			I	D	D	D
	MC8.2.2 rewrite 5 simple equations (involving multiplication) by using the associative property (3x5)x7=3x(5x7)			I	D	D	D
MC8.3 Distributive property	MC8.3.1 rewrite 5 equations by applying the distributive property 6x(3+4)=6x3+6x4					I	D
MC8.4 Identify property	MC8.4.1 explain or define the properties of zero (additive identify) (6 + 0 = 6) (0 + 9 = 9)		I	D	D	D	D
	MC8.4.2 explain or define the properties of one (multiplicative identify) (8 x 1 = 8 1 x 4 = 4)			I	D	D	D
	After completing each of the above indicators, the student will demonstrate the operations with properties with a self-devised problem. (At appropriate skill level-I/D/M)						
MC9.0 GEOMETRY	The student will						
MC9.1 Geometric shapes	MC9.1.1 recognize and identify a circle, a triangle, and a square from a set of geometric shapes (100% accuracy)	I/D	M				
	MC9.1.2 identify closed and open curves from a set of curves (100% accuracy)	I	D	D	M		
	MC9.1.3 identify a cube, a sphere, and a rectangular solid from a set of geometic solids (100% accuracy)		I	D	D	M	
	MC9.1.4 identify a cone, a pyramid, and a cylinder from a set of geometric solids (100% accuracy)				I	D	D
MC9.2 Geometric vocabulary	The student will						
	MC9.2.1 give examples of point, line, plane, curve and line segment			I	D	D	D
	MC9.2.2 give examples of ray, parallel lines, angles, regions, polygons, bisector, and intersection				I	D	D
	MC9.2.3 match 10 pairs of congruent figures from a random arrangement of the figures (100% accuracy)				I	D	M
	MC9.2.4 match 5 pairs of similar figures from a random arrangement of the figures (100% accuracy)				I	D	M
	MC9.2.5 identify parallel, perpendicular, and intersecting lines from 10 examples (100% accuracy)				I	D	M

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MC9.3 Geometric drawings and constructions	MC9.3.1 draw a triangle, circle, square, and rectangle (100% accuracy)	I/D	M				
	MC9.3.2 draw a point, parallel lines, intersecting lines, perpendicular lines, a line segment, and angles			I	D	D	M
	MC9.3.3 draw a model of a cube, rectangular solid, and a sphere				I	D	D
	MC9.3.4 measure, with a protractor, each of 5 given angles to the nearest degree					I	D
	MC9.3.5 use a compass to construct circles with radii of 2, 4, and 6 inches					I	D
	MC9.3.6 copy a given angle useing a compass and ruler					I	D
	MC9.3.7 construct perpendicular lines with a ruler and compass					I	D
	MC9.3.8 bisect an angle using a ruler and compass					I	D
	After completing each of the indicators above, the student will demonstrate the operation or concept in a self-devised example. (At appropriate skill level-I/D/M)						

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MP1.0 IDENTIFICATION	The student will						
MP1.1 Recognize and define the problem	MP1.1.1 underline the question in 5 given simulation problems	I	D	M			
	MP1.1.2 underline the instructions in 5 given simulations lacking formal questions	I	D	D	M		
	MP1.1.3 identify the appropriate label being requested in 5 simulation problems	I	D	D	M		
	MP1.1.4 restate the problem (given 5 simulation problems) accurately in his own words		I	D	D	M	
MP1.2 Identify the process needed to solve a problem	MP1.2.1 indicate the basic operation required to solve each of 5 simulation problems	I	D	D	D	D	M
	MP1.2.2 identify the problems requiring secondary operations (5 simulation problems)			I	D	D	M
	MP1.2.3 identify the primary and secondary operations necessary to solve 5 simulation problems requiring these operations			I	D	D	M
MP2.0 COLLECT, ORGANIZE, AND PRESENT DATA							
MP2.1 Collect data	MP2.1.1 underline the information needed to solve each of 5 given simulation problems	I	D	D	D	D	M
	MP2.1.2 identify those problems from a given set of five, which contain sufficient data and information needed to solve the problem				I	D	M
MP2.2 Organize data	The student will						
	MP2.2.1 organize the data into a usable form (lists, graphs, tables) (five problems)	I	D	D	D	D	D
MP2.3 Present data	MP2.3.1 present data from 5 simulation problems in computable form	I	D	D	D	D	D
MP3.0 SOLVE PROBLEM							
MP3.1 Compute and label	MP3.1.1 determine and appropriately label the solution to 5 given simulation problems	I	D	D	D	D	D

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MP4.0 INTERPRET ANSWER							
	MP4.1.1 summarize the method used to obtain each of the answers to 5 simulation problems		I	D	D	D	D
	MP4.1.2 interpret the results (MP4.1.1) in terms of the statement of each of the 5 simulation problems		I	D	D	D	D
	******SIMULATION PROBLEMS MUST BE APPROPRIATE FOR GRADE LEVEL****						

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MM1.0 TIME	The student will						
MM1.1 Parts of the day (100% accuracy)	MM1.1.1 identify the time of day by responding verbally to picture stimuli displaying scenes of morning, afternoon, or night situations	I/M					
MM1.2 Comparative time (100% accuracy)	MM1.2.1 classify events using the terms part, present, future, on time, late, early, etc...	I/M					
	MM1.2.2 list the days of the week in proper sequence	I/M					
	MM1.2.3 complete a calendar by placing names of months and days of week in proper place	I	D	M			
MM1.3 Telling Time	MM1.3.1 state the correct time when shown 10 clock faces to the nearest hour	M					
	to the nearest 1/2 hour	I/D	M				
	to the nearest quarter hour		I/D	M			
	to the nearest 5 minutes			I/D	M		
	to the nearest minute			I	D	M	
MM1.4 Elapsed time	MM1.4.1 compute elapsed time to the nearest hour	I	D	M			
	minute		I	D	M		
	second			I	D	M	
MM2.0 MONEY	The student will						
MM2.1 Denominations (100% accuracy)	MM2.1.1 identify each of the following coins - penny, nickel dime, quarter, half dollar	I/D	M				
MM2.2 Value of coins (100% accuracy)	MM2.2.1 identify the number of pennies in a nickle, dime, quarter, half dollar, and dollar	I/D	M				
	MM2.2.2 identify the number of nickles in a dime, quarter, half dollar, and dollar		I	D	M		
	MM2.2.3 identify the number of dimes in a half dollar and dollar		I/D	M			
	MM2.2.4 identify the number of quarters in a half dollar and dollar		I/D	M			
	MM2.2.5 identify the number of half dollars in a dollar						
MM2.3 Basic operations	MM2.3.1 use the basic number operations to compute the answer to 10 money problems						
	addition		I	D	M		
	subtraction		I	D	M		
	multiplication			I	D	M	
	division				I	D	M

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MM3.0 LENGTH							
MM3.1 Comparative length	MM3.1.1 compare lengths using non-standard instruments (paper clips, shoes, dollar bills, pencils)	I/M					
	MM3.1.2 classify objects using comparative terms (short, long, tall, high, wide) 100% accuracy	I/M					
	MM3.1.3 compare lengths of five objects using standard measurements and instruments (100% accuracy)	I	D	M			
	The student will						
	MM3.1.4 compute differences in length						
	to the nearest whole unit		I	D	M		
	to the nearest 1/2 unit		I	D	D	M	
	to other fractional estimates			I	D	D	M
	MM3.1.5 use appropriate units to measure varying lengths (foot versus mile; mm versus km)	I	D	D	D	M	
	MM3.1.6 will use map scales to compute distances			I	D	M	
MM3.2 Perimeter and area	MM3.2.1 compute the perimeters of 5 given polygons					I	D
	MM3.2.2 compute the circumference of 5 circles					I	D
	MM3.2.3 compute the area of 5 triangles						I
	MM3.2.4 compute the area of 5 irregular rectangular planes						I
	MM3.2.5 compute the area of 5 circles						I
	MM3.2.6 compute the area of 5 parallelograms						I
	MM3.2.7 use the correct square units in reporting the areas computed for MM3.2						I
MM4.0 VOLUME (SOLID OBJECT)							
MM4.1 Comparative volumne	MM4.1.1 compare objects using terminology such as more than, less thank, full, empty, most, least...	I	D	D	M		
	MM4.1.2 compute the volume of rectangular solids using models and blocks						I
MM4.2 Standard units	MM4.2.1 compute volumne of 5 objects using the cubic centimeter and its multiples						I

GOAL COMPETENCY	PERFORMANCE INDICATOR	GRADE LEVEL					
		K-1	2	3	4	5	6
MM5.0 CAPACITY (Liquid filling)	The student will						
MM5.1 Comparative terms	MM5.1.1 identify containers by their capacities (ml, cl, l, kl) by using calibrated cups		I	D	D	M	
	MM5.1.2 convert the capacity of 5 containers from liters to miltiples of liters			I	D	D	D
MM6.0 TEMPERATURE							
MM6.1 Determining temperature (celcius and farenheit)	MM6.1.1 read the temperature from 3 model thermometers			I/D	M		
	MM6.1.2 describe the readings from 3 model thermometers in comparative terms (cool, warm, hot...) and place the models in ascending order according to temperature			I/D	M		
	MM6.1.3 mark thermometers with different scales for boiling and freezing points of pure water				I	D	M
	MM6.1.4 read the temperature from two model thermometers and compute the difference (5 problems)			I/D	M		

Computation and Concepts (MC)

Goal/Competency	Performance Indicator	I	D	M
		(Grade Level)		
MC 1.0 NUMERATION Count sequentially	The Student Will			
	MC1.1.1 count to 10	1	1	1
	MC1.1.2 select a given number of objects (up to 10) from a set of objects	1	1	1
	MC1.1.3 correctly read numerals from 1 to 10	1	1	1
	MC1.1.4 count orally to 25	1	1	1
	MC1.1.5 write numerals to 25	1	1	1
	MC1.1.6 count orally to 100	1	1	1
	MC1.1.7 write numerals to 100	1	1	2
MC 1.2 Skip count ty 10's, 5's, 2's				
	MC1.2.1 orally count by 10's to 100	1	1	1
	MC1.2.2 orally count by 5's to 25	1	1	2
	MC1.2.3 write to 100 by 10's	1	1	2
	MC1.2.4 count by 5's to 100 (orally and written)	1	2	3
	MC1.2.5 count orally by 2's to 50	1	1	2
	MC1.2.6 count orally by 2's to 100	1	2	3
MC 1.3 Odd/even numbers	MC1.3.1 tell if a given number (1-100) is odd or even	1	2	3
MC 1.4 Ordinal numbers	MC1.4.1 identify first through fifth place from a given set of objects or pictures	1	1	1
MC 1.6 Symbols	MC1.6.1 identify (orally and written) the symbols of arithmetic	1	2-4	5
	MC1.6.2 demonstrate the use of each symbol in a self-devised problem	1	2-4	5
MC 1.7 Sets	MC1.7.1 match objects using 1 to 1 correspondence	1	1	1
	MC1.7.2 identify the members of a set	1	2-4	5
	MC1.7.3 identify null, finite and infinite sets	1	2-4	5
	MC1.7.4 identify subsets	1	2-4	5

Goal/Competency	Performance Indicator	I (Grade Level)	D (Grade Level)	M (Grade Level)
MC 2.0 Operations	The Student Will Compute			
MC2.1 Addition	MC2.1.1 10 problems using number pairs with sums 10 or less (3+4)	1	1	1
	MC2.1.2 10 basic fact problems with sums 18 or less (9+6)	1	1	2
	MC2.1.3 100 basic facts within 10 minutes (100% accuracy)	1	2	3
	MC2.1.4 10 problmes of 3 single digit numerals (4+6+2)	1	1	2
	MC2.1.5 10 problems with tens without regrouping (25+33)	1	1	2
	MC2.1.6 10 problems with hundreds without regrouping (245+312)	1	1	2
	After completing each of the above indicators, the student will demonstrate understanding of addition by means of solving a self-devised problem. (At appropriate skill Level-I/D/M)			
	After completing each of the above indicators, the student will explain regrouping interms of place value. (At appropriate skill level-I/D/M)			
MC2.2 Subtraction	MC2.2.1 10 problems with differences 10 or less (9-4)	1	1	2
	MC2.2.4 10 problems with tens without regrouping (36-21)	1	1	2
	MC2.2.5 10 problems with hundreds without regrouping (387-243)	1	2	2
	MC2.2.6 10 problems with tens with regrouping (24-16)	1	2	3
	After completing each of the above indicators, student will demonstrate understanding of subtraction by means of solving a self-devised problem. (At appropriate skill level-I/D/M)			

Goal/Competency	Performance Indicator	I	D	M
		(Grade Level)		
MC 4.0 Fractions	The Student Will			
MC4.1 Fractional Parts	MC4.1.1 identify simple fractions (1/4, 1/3, 1/2, 1/5, 2/3, 3/4, 2/4) when shown representative shapes (100% accuracy)	1	2	3
	After completing each of the above indicators, the student will demonstrate the operations with fractions in a problem devised by the student. (At appropriate skill level-I/D/M)			
MC 5.0 Place Value And Decimal Numbers				
MC5.1	MC5.1.1 identify the number of tens and ones in 10 two digit numbers (23-2 tens and 3 ones)	1	2	3
	MC5.1.2 write the numberal for 10 numbers given the number of tens and ones in each number (3 tens and 5 ones - 35)	1	2	3
MC 9.0 Geometry				
MC9.1 Geometric Shapes	MC9.1.1 recognize and identify a circle, a triangle, and a square from a set of geometric shapes (100% accuracy)	1	1	2
	MC9.1.2 identify closed and open curves from a set of curves (100% accuracy)	1	2-3	4
MC9.3 Geometric drawings and constructions	MC9.3.1 draw a triangle, circle, square, and rectangle (100% accuracy)	1	1	2
	After completing each of the indicators above, the student will demonstrate the operation or concept in a self-devised example. (At appropriate skill level-I/D/M)			

PROBLEM SOLVING (MP)

Goal/Competency	Performance Indicator		I	D	M
			(Grade Level)		
MP1.0 IDENTIFICATION	The Student Will				
MP1.1 Recognize and define the problem	MP1.1.1	underline the question in 5 given simulation problems	1	2	3
	MP1.1.2	underline the instructions in 5 given simulations lacking formal questions	2	2-3	4
	MP1.2.3	identify the appropriate label being requested in 5 simulation problems	1	2-3	4
MP1.2 Identify the process needed to solve a problem	MP1.2.1	indicate the basic operation required to solve each of 5 simulation problems	2	2-5	6
MP2.0 ORGANIZE, COLLECT, AND PRESENT DATA					
MP2.1 Collect data	MP2.1.1	underline the information needed to solve each of 5 given simulation problems	1	2-5	6
MP2.2 Organize data	MP2.2.1	organize the data into a usable form (lists, graphs, tables (five problems)	1	2-6	
MP2.3 Present data	MP2.3.1	present data from 5 simulation problems in computable form	1	2-6	
MP3.0 SOLVE PROBLEM					
MP3.1 Compute and label	MP3.1.1	determine and appropriately label the solution to 5 given simulation problems	1	2-6	

*****SIMULATION PROBLEMS MUST BE APPROPRIATE FOR GRADE LEVEL*****

MEASUREMENT (MM)

Goal/Competency	Performance Indicator		I	D	M
			(Grade Level)		
MM1.0 TIME		The Student Will			
MM1.1 Parts of the day (100% accuracy)	MM1.1.1.	identify the time of day by responding verbally to picture stimuli displaying scenes of morning, afternoon, or night situations.	1	1	1
MM1.2 Comparative time (100% accuracy)	MM1.2.1	classify events using the terms past, present, future, on time, late, early, etc...	1	1	1
	MM1.2.1	list the days of the week in proper sequence	1	1	2
	MM1.2.3	complete a calendar by placing names of months and days of week in proper place	1	2	3
MM1.3 Telling time	MM1.3.1	state the correct time when shown 10 clock faces			
		to the nearest hour	1	1	1
		to the nearest half hour	1	1	2
MM1.4 Elapsed time	MM1.4.1	compute elapsed time to the nearest hour	1	2	3
MM2.0 MONEY					
MM2.1 Denomination (100% accuracy)	MM2.1.1	identify each of the following coins - penny, nickle, dime, quarter, half dollar	1	1	2
MM2.2 Value of coins (100% accuracy)	MM2.2.1	identify the number of pennies in a nickle, dime, quarter, half dollar, and dollar	1	1	2

Goal/Competency		Performance Indicator	I	D	M
			(Grade Level)		
MM3.0 LENGTH		The Student Will			
MM3.1 Comparative length	MM3.1.1.	compare lengths using non-standard instruments (paper clips, shoes, dollar bills, pencils)	1	1	1
	MM3.1.2	classify objects using comparative terms (short, long, tall, high, wide) 100% accuracy	1	1	1
	MM3.1.3	compare lengths of five objects using standard measurements and instruments (100% accuracy)	1	2	3
	MM3.1.5	use appropriate units to measure varying lengths (foot versus mile; mm versus km)	1	2-4	5
MM4.0 VOLUME (Solid Object)					
MM4.1 Comparative Volume	MM4.1.1	compare objects using terminology such as more than, less than, full, empty, most, least.....	1	2-3	4

SECOND GRADE
COMPUTATION AND CONCEPTS (MC)

Goal/Competency		Performance Indicator	I	D	M (Grade Level)
MC1.0 NUMERATION		The Student will			
MC1.1 Count sequentially	MC1.1.7	write numerals to 100	1	1	2
MC1.2 Skip count by 10's, 5's, 2's	MC1.2.2	orally count by 5's to 25	1	1	2
	MC1.2.3	write to 100 by 10's	1	1	2
	MC1.2.4	count by 5's to 100 (orally & written)	1	2	3
	MC1.2.5	count orally by 2's to 50	1	1	2
	MC1.2.6	count orally by 2's to 100	1	2	3
MC1.2 Odd/even numbers	MC1.2.1	tell if a given number (1-100) is odd or even	1	2	3
MC1.6 Symbols	MC1.6.1	identify (orally and written the symbols of arithmetic (+ - ÷ = ≠)	1	2-4	5
	MC1.6.2	demonstrate the use of each symbol in a self-devised problem	1	2-4	5
MC1.7 Sets	MC1.7.2	identify the members of a set	1	2-4	5
	MC1.7.3	identify null, finite and infinite sets	1	2-4	5
	MC1.7.4	identify subsets	1	2-4	5
MC2.0 OPERATIONS		The student will compute			
MC2.1 Addition	MC2.1.2	10 basic fact problems with sums 18 or less (9 + 6)	1	1	2
	MC2.1.3	100 basic facts within 10 minutes (100% accuracy)	1	2	3
	MC2.1.4	10 problems of 3 single digit numerals (4 + 6 + 2)	1	1	2
	MC2.1.5	10 problems with tens without regrouping (25 + 33)	1	1	2
	MC2.1.6	10 problems with hundreds without regrouping (245 + 312)	1	1	2
	MC2.1.7	10 problems with tens with regrouping (26 + 35)	2	2	3
	MC2.1.8	10 problems with hundreds with regrouping (268 + 493)	2	3	3
	MC2.1.9	10 problems in column form using hundreds (246+357+468)	2	3	3
	MC2.1.10	10 problems with thousands (2685 + 3421)	2	3	3
		After completing each of the above indicators, the student will demonstrate understanding of addition by means of solving a self devised problem. (At appropriate skill level - I/D/M)			
		After completing each of the above indicators, the student will explain regrouping in terms of place value. (At appropriate skill lelve - I/D/M)			

Goal/Competency	Performance Indicator	I	D	M
		(Grade Level)		
MC2.2 Subtraction	MC2.2.1 10 problems with differences 10 or less (9-4)	1	1	2
	MC2.2.2 the 100 basic facts in 10 minutes (100% accuracy)	2	3	4
	MC2.2.3 100 basic facts in 5 minutes (100% accuracy)	2	3-4	5
	MC2.2.4 10 problems with tens without regrouping (36-21)	1	2	2
	MC2.2.5 10 problems with hundreds without regrouping (387-243)	1	2	2
	MC2.2.6 10 problems with tens with regrouping (24-16)	1	2	3
	MC2.2.7 10 problems with hundreds with regrouping (465-396)	2	3	4
	MC2.2.8 10 problems with thousands with regrouping(3527-1649)	2	3	4
	After completing each of the above indicators, the student will demonstrate understanding of subtraction by means of solving a self-devised problem. (At appropriate skill level - I/D/M)			

Goal/Competency	Performance Indicator	I	D	M
		(Grade Level)		
	The Student Will Compute			
MC2.3 Multiplication	MC2.3.1 basic facts through 5 in 5 minutes (100% accuracy)	2	2	3
	MC2.3.2 basic facts through 9 in 10 minutes (100% accuracy)	2	3	4
	MC2.3.3 basic facts through 9 in 5 minutes (100% accuracy)	2	3-4	5
	After completing each of the above indicators, the student will demonstrate understanding of multiplication by means of solving a self-devised problem. (At appropriate skill level-I/D/M)			
MC4.0 FRACTIONS				
MC4.1 Fractional Parts	MC4.1.1 identify simple fractions (1/4, 1/3, 1/2, 1/5, 2/3, 3/4, 2/4) when shown representative shapes (100% accurate)	1	2	3
MC5.0 PLACE VALUE AND DECIMAL NUMBERS				
MC5.1 Place Value to 10	MC5.1.1 identify the number of tens and ones in 10 two digit numbers (23-2 tens and 3 ones)	1	2	3
	MC5.1.2 write the numeral for 10 numbers given the number of tens and ones in each number (3 tens and 5 ones - 35)	1	2	3
MC5.2 Place value to 100	MC5.2.1 identify the number of hundreds, tens, and ones in 10 three digit numbers (312-3 hundreds, 1 ten, 2 ones)	2	3	4
	MCt.2.2 write the numeral representing 10 numbers given the number of hundreds, tens, and ones (2 hundreds, 5 tens, 8 ones - 258)	2	3	4
MC5.5 Rounding	MC5.5.1 round 10 whole numbers less than 100 to the nearest 10 (87 to 90)			
	After completing each of the above indicators, the student will demonstrate the operations with decimals in a self-devised problem. (At appropriate skill level-I/D/M)			

Goal/Competency	Performance Indicator	I	D	M (Grade Level)
MC9.0 GEOMETRY	The Student Will			
MC9.1 Geometric shapes	MC9.1.1 recognize and identify a circle, a triangle, and a square from a set of geometric shapes (100% accuracy)	1	1	2
	MC9.1.2 identify closed and open curves from a set of curves (100% accuracy)	1	2-3	4
	MC9.1.3 identify a cube, a sphere, and a rectangular solid from a set of geometric solids (100% accuracy)	2	3-4	5
MC9.3 Geometric drawings and construction	MC9.3.1 draw a triangle, circle, square, and rectangle (100% accuracy)	1	1	2

PROBLEM SOLVING (MP)

Goal/Competency		Performance Indicator		I	D	M
				(Grade Level)		
MP1.0 IDENTIFICATION						
MP1.1	Recognize and define the problem	MP1.1.1.	underline the question in 5 given simulation problems	1	2	3
		MP1.1.2	underline the instructions in 5 given simulations lacking formal questions	1	2-3	4
		MP1.1.3	identify the appropriate label being requested in 5 simulation problems	1	2-3	4
		MP1.1.4	restate the problem (given 5 simulation problems) accurately in his own words	2	3-4	5
MP1.2	Identify the process needed to solve a problem	MP1.2.1	indicate the basic operation required to solve each of 5 simulation problems	1	2-5	6
MP2.0 COLLECT, ORGANIZE, AND PRESENT DATA			The Student Will			
MP2.1	Collect data	MP2.1.1	underline the information needed to solve each of 5 given simulation problems	1	2-5	6
MP2.2	Organize data	MP2.2.1	organize the data into a usable form (lists, graphs, tables, five problems)	1	2-5	6
MP2.3	Present data	MP2.3.1	present data from 5 simulation problems in computable form	2	2-6	-
MP3.0 SOLVE PROBLEM						
MP3.1	Compute and label	MP3.1.1	determine and appropriately label the solution to 5 given simulation problems	1	2-6	-

Goal/Competency	Performance Indicator	I	D	M (Grade Level)
MP4.0 INTERPRET ANSWER	MP4.1.1 summarize the method used to obtain each of the answers to simulation problems	2	3-6	-
	MP4.1.2 interpret the results (MP4.1.1) in terms of the statement of each of the 5 simulation problems	2	3-6	-
	****SIMULATION PROBLEMS MUST BE APPROPRIATE FOR GRADE LEVEL****			

MEASUREMENT(MM)

Goal/Competency		Performance Indicator		I (Grade Level)	D (Grade Level)	M (Grade Level)
MM1.0 TIME		The Student Will				
MM1.2	Comparative time (100% accuracy)	MM1.2.2	list the day of the week in proper sequence	1	1	2
		MM1.2.3	complete a calendar by placing names of months and days of the week in proper place	1	2	3
MM1.3	Telling time	MM1.3.1	state the correct time when shown 10 clock faces to the nearest half hour;	1	1	2
			nearest quarter hour	2	2	3
MM1.4	Elapsed Time	MM1.4.1	compute elapsed time to the nearest hour	1	2	3
			minute	2	3	4
MM2.0 MONEY						
MM2.1	Denominations (100% accuracy)	MM2.1.1	identify each of the following coins - penny, nickle, dime, quarter, half dollar	1	1	2
MM2.2	Value of coins (100% accuracy	MM2.2.1	identify the number of pennies in a nickle, dime, quarter, half dollar, and dollar	1	1	2
		MM2.2.2	identify the number of nickles in a dime, quarter, half dollar, and dollar	2	3	4
		MM2.2.3	identify the number of dimes in a half dollar and dollar	2	2	3
		MM2.2.4	identify the number of quarters in a half dollar and dollar	2	2	3
		MM2.2.5	identify the number of half dollars in a dollar	2	2	3
MM2.3	Basic Operations	MM2.3.1	use the basic number operations to compute the answer to 10 money problems			
			addition	2	3	4
			subtraction	2	3	4

Goal/Competency		Performance Indicator	I	D	M (Grade Level)
MM3.0 LENGTH		The Student Will			
MM3.1 Comparative length	MM3.1.3	compare the lengths of five objects using standard measurements and instruments (100% accuracy)	1	2	3
	MM3.1.4	compute differences in length			
		to the nearest whole unit	2	3	4
		to the nearest 1/2 unit	2	3-4	5
	MM3.1.5	use appropriate units to measure varying lengths (foot versus mile; mm versus km)	1	2-4	5
MM4.0 VOLUME (SOLID OBJECT)					
MM4.1 Comparative Volume	MM4.1.1	compare objects using terminology such as more than, less than, full, empty, most, least....	1	2-3	4
MM5.0 CAPACITY (liquid filling)					
MM5.1 Comparative terms	MM5.1.1	identify containers by their capacities (ml, cl, l, kl) by using calibrated cups	2	3-4	5

THIRD GRADE
COMPUTATION AND CONCEPTS (MC)

Goal/Competency	Performance Indicator		I	D	M (Grade Level)
MC1.0 NUMERATION	The Student Will				
MC1.2 Skip count by 10's, 5's, 2's	MC1.2.4	count by 5's to 100 (orally and written)	1	2	3
	MC1.2.6	count orally by 2's to 100	1	2	3
MC1.3 Odd/even numbers	MC1.3.1	tell if a given number (1-100) is odd or even	1	2	3
MC1.6 Symbols	MC1.6.1	identify (orally and written) the symbols of arithmetic (+ - x ÷ = ≠	2	2-4	5
	MC1.6.2	demonstrate the use of each symbol in a self-devised problem	1	2-4	5
MC1.7 Sets	MC1.7.2	identify the numbers of a set	1	2-4	5
	MC1.7.3	identify null, finite and infinite sets	1	2-4	5
	MC1.7.4	identify subsets	1	2-4	5
MC2.1 Addition	MC2.1.3	100 basic facts within 10 minutes (100% accuracy)	1	2	3
	MC2.1.7	10 problems with tens with regrouping (26+35)	2	2	3
	MC2.1.8	10 problems with hundreds with regrouping (268+493)	2	3	3
	MC2.1.9	10 problems in column form using hundreds (246+357+468)	2	3	3
	MC2.1.10	10 problems with thousands (2685+3421)	2	3	4
	After completing each of the above indicators, the student will demonstrate understanding of addition by means of solving a self-devised problem. (At appropriate skill level-I/D/M)				
	After completing each of the above indicators, the student will explain regrouping interms of place value. (At appropriate skill level-I/D/M)				

Goal/Competency	Performance Indicator	I	D	M
		(Grade Level)		
	The Student Will Compute			
MC2.2 Subtraction	MC2.2.2 The 100 basic facts in 10 minutes (100% accuracy)	2	3	4
	MC2.2.3 100 basic facts in 5 minutes (100% accuracy)	2	3-4	5
	MC2.2.6 10 problems with tens with regrouping (24-16)	1	2	3
	MC2.2.7 10 problems with hundreds with regrouping (465-396)	2	3	4
	MC2.2.8 10 problems with thousands with regrouping (3527-1649)	2	3	4
	After completing each of the above indicators, the student will demonstrate understanding of subtraction by means of solving a self-devised problem. (At appropriate skill level-I/D/M)			
MC2.3 Multiplication	MC2.3.1 basic facts through 5 in 5 minutes (100% accuracy)	2	2	3
	MC2.3.2 basic facts through 9 in 10 minutes (100% accuracy)	2	3	4
	MC2.3.3 basic facts through 9 in 5 minutes (100% accuracy)	2	3-4	5
	MC2.3.4 10 problems of ones times tens (5 x 36)	3	3	4
	MC2.3.5 10 problems of ones times hundreds (4 x 394)	3	4	5
	After completing each of the above indicators, the student will demonstrate understanding of multiplication by means of solving a self-devised problems. (At appropriate skill level-I/D/M)			

Goal/Competency	Performance Indicator	I	D	M
		(Grade Level)		
	The Student Will Compute			
MC2.4 Division	MC2.4.1 90 basic facts in 10 minutes (100% accuracy)	3	4	5
	MC2.4.2 10 problems with tens/ones without remainders (36/2)	3	4	5
	MC2.4.3 10 problems with tens/ones with remainders (55/6)	3	4	5
	MC2.4.4 10 problems with hundreds/ones without remainders (368/4	3	4	5
	MC2.4.5 10 problems with hundreds/ones with remainders (562/5) .	3	4	5
	After completing each of the above indicators, the student will demonstrate understanding of division by means of solving a self-devised problem. (At appropriate skill level-I/D/M)			
MC4.0 FRACTIONS				
MC4.1 Fractional parts	MC4.1.1 identify simple fractions (1/4, 1/3, 1/2, 1/5, 2/3, 3/4, 2/4) with shown representative shapes (100% accuracy)	1	2	3
	MC4.4.2 identify the fractional part indicated from a given set of objects	3	3	3
MC4.1 Numerators and denominators	MC4.2.1 identify the numerator in each of 10 given fractions	3	3	3
	MC4.2.2 identify the denominator in each of 10 given fractions	3	3	3
MC4.7 Addition of Fractions	MC4.7.1 add 10 pairs of fractions with common denominators	3	3	4
MC4.8 Subtraction of fractions	MC4.8.1 subtract 10 pairs of fractions with common denominators	3	4	5
	After completing each of the above indicators, the student will demonstrate the operations with fractions in a problem devised by the student. (At appropriate skill level-I/D/M)			

Goal/Competency		Performance Indicator	I	D	M (Grade Level)
MC5.0 PLACE VALUE AND DECIMAL NUMBERS		The Student Will			
MC5.1 Place value to 10	MC5.1.1	identify the number of tens and ones in 10 two digit numbers (23-2 tens and 3 ones)	1	2	3
	MC5.1.2	write the numeral for 10 numbers given the number of tens and ones in each number (3 tens and 5 ones - 35)	1	2	3
MC5.2 Place value to 100	MC5.2.1	identify the number of hundreds, tens, and ones in 10 three digit numbers (312-3 hundreds, 1 ten, 2 ones)	2	3	4
	MC5.2.2	write the numeral representing 10 numbers given the number of hundreds, tens, and ones (2 hundreds, 5 tens, 8 ones-258)	2	3	4
MC5.3 Place value to 100,000	MC5.3.1	identify place value and write to the 100,000	3	4	5
MC5.5 Rounding	MC5.5.1	round 10 whole numbers less than 100 to the nearest 10 (87 to 90)	2	3	4
	MC5.5.2	round 10 whole numbers less than 1000 to the nearest 10 and the nearest 100 (782-780,800)	3	4	5
		After completing each of the above indicatorrs, the student will demonstrate the operations with decimals in a self-devised problem. (At appropriate skill level-I/D/M)			

Goal/Competency		Performance Indicator	I	D	M (Grade Level)
MC8.1 NUMBER PRINCIPLES		The Student Will			
MC8.1 Commutative Property	MC8.1.1	rewrite 5 simple addition equations by applying the commutative property (3+8= 8+3)	3	4-6	
	MC8.1.2	rewrite 5 simple equations involving multiplication by using the commutative property (8x4=4x8)	3	4-6	
MC8.2 Associative Property	MC8.2.1	rewrite 5 simple addition equations (with more than two addends) by applying the associative property (3+5)+2=3+(5+2)	3	4-6	
	MC8.2.2	rewrite 5 simple equations (involving multiplication) by using the associative property (3x5) x 7 = 3 x 7 (5x7)	3	4-6	
MC8.4 Identify Property	MC8.4.1	explain or define the properties of zero (additive identify) (6+0=6) (0+9=9)	2	3-6	
	MC8.4.2	explain or define the properties of one (multiplicative identity) (8x1=8 1x4=4)	3	4-6	
		After completing each of the above indicators, the student will demonstrate the operations with properties with a self-devised problem. (At appropriate skill level I/D/M)			
MC9.0 GEOMETRY					
MC9.1 Geometric Shapes	MC9.1.2	identify closed and open curves from a set of curves (100% accuracy)	1	2-3	4
	MC9.1.3	identify a cube, a sphere, and a rectangular solid from a set of geometric solids (100%)	2	3-4	5

Goal/Competency		Performance Indicator		I (Grade Level)	D (Grade Level)	M (Grade Level)
MC9.2	Geometric Vocabulary	MC9.2.1	give examples of point, line, plane, curve, and line segment	3	4-6	
MC9.3	Geometric drawings and construction	MC9.3.2	draw a point, parallel lines, intersecting lines, perpendicular lines, a line segment, and angles	3	4-5	6

PROBLEM SOLVING (MP)

Goal/Competency		Performance Indicator	I	D	M
			(Grade Level)		
MP1.0 IDENTIFICATION					
		The Student Will			
MP1.1 Recognize and define the problem	MP1.1.1	underline the question in 5 given simulation problems	1	2	3
	MP1.1.2	underline the instructions in 5 given simulations lacking formal questions	2	2-3	4
	MP1.1.3	identify the appropriate label being requested in 5 simulation problems	1	2-3	5
	MP1.1.4	restate the problem (given 5 simulation problems) accurately in his own words	2	3-4	5
MP1.2 Identify the process needed to solve a problem	MP1.2.1	indicate the basic operation required to solve each of 5 simulation problems	1	2-5	6
	MP1.2.2	identify the problems requiring secondary operations (5 simulation problems)	3	4-5	6
	MP1.2.3	identify the primary and secondary operations necessary to solve 5 simulation problems requiring these operations	3	4-5	6
MP2.0 COLLECT, ORGANIZE, AND PRESENT DATA					
MP2.1 Collect data	MP2.1.1	underline the information needed to solve each of 5 given simulation problems	1	2-5	6
MP2.2 Organize data	MP2.2.1	organize the data into a usable form (lists, graphs, tables. (five problems)	2	2-6	
MP2.3 Present data	MP2.3.1	present data from 5 simulation problems in computable form	1	2-6	
MP3.0 SOLVE PROBLEM					
MP3.1 Compute and label	MP3.1.1	determine and appropriately label the solution to 5 given simulation problems	1	2-6	

Goal/Competency	Performance Indicator	I	D	M (Grade Level)
MP4.0 INTERPRET ANSWER	The Student Will			
	MP4.1.1 summarize the method used to obtain each of the answers to 5 simulation problems	2	3-6	
	MP4.1.2 interpret the results (MP4.1.1) in terms of the statement of each of the 5 simulation problems	2	3-6	
	******SIMULATION PROBLEMS MUST BE APPROPRIATE FOR GRADE LEVEL******			

MEASUREMENT (MM)

Goal/Competency	Performance Indicator		I	D	M
			(Grade Level)		
MM1.0 TIME		The Student Will			
MM1.2 Comparative time (100% accuracy)	MM1.2.3	complete a calendar by placing names of months and days of week in proper place	1	2	3
MM1.3 Telling time	MM1.3.1	state the correct time when shown 10 clock faces			
		to the nearest quarter hour	2	2	3
		to the nearest 5 minutes	3	3	4
		to the nearest minute	3	4	5
MM1.4 Elapsed time	MM1.4.1	compute elapsed time to the nearest			
		hour	1	2	3
		minute	2	3	4
		second	3	4	5
MM2.2 Value of coins (100% accuracy)	MM2.2.2	identify the number of nickles in a dime, quarter, half dollar, and dollar	2	3	4
	MM2.2.3	identify the number of dimes in a half dollar and a dollar	2	2	3
	MM2.2.4	identify the number of quarters in a half dollar and dollar	2	2	3
	MM2.2.5	identify the number of half dollars in a dollar	2	2	3
MM2.3 Basic operations	MM2.3.1	use the basic number operations to compute the answer to 10 money problems			
		addition	2	3	4
		subtraction	2	3	4
		multiplication	3	4	5

Goal/Competency	Performance Indicator		I	D	M
			(Grade Level)		
MM3.0 LENGTH		The Student Will			
MM3.1 Comparative length	MM3.1.3	compare lengths of five objects using standard measurements and instruments (100% accuracy)	1	2	3
	MM3.1.4	compute differences in length			
		to the nearest whole unit	2	3	4
		to the nearest 1/2 unit	2	3-4	5
		to other fractional estimates	3	4-5	6
	MM3.1.5	Use appropriate units to measure varying lengths	1	2-4	5
	MM3.1.6	will use map scales to compute distances	3	4	5
MM4.0 VOLUME (SOLID OBJECT)					
MM4.1 Comparative volume	MM4.1.1	compare objects using terminology such as more than, less than, full, empty, most, least...	1	2-3	4
MM5.0 CAPACITY (liquid filling)					
MM5.1 Comparative terms	MM5.1.1	identify containers by their capacities (ml, cl, l, k) by using calibrated cups	2	3-4	5
	MM5.1.2	convert the capacity of 5 containers from liters to multiples of liters	3	4-5	6
MM6.0 TEMPERATURE					
MM6.1 Determining temperature (celcius and farenheit)	MM6.1.1	read the temperature from 3 model thermometers	3	3	4
	MM6.1.2	describe the readings from 3 model thermometers in comparative terms (cool, warm, hot...) and place the models in ascending order according to temperature	3	3	4
	MM6.1.4	read the temperature from two model thermometers and compute the difference (5 problems)	3	3	4

FOURTH GRADE
COMPUTATION AND CONCEPTS (MC)

Goal/Competency	Performance Indicator		I	D	M
			(Grade Level)		
MC1.0 NUMERATION	The Student Will				
MC1.5 Roman numerals	MC1.5.1	read and write standard Roman numerals (I V X L C M)	4	5	6
MC1.6 Symbols	MC1.6.1	identify (orally and written) the symbols of arithmetic (+ - x ÷ = ≠)	1	2-4	5
	MC1.6.2	demonstrate the use of each symbol in a self-devised problem	1	2-4	5
MC1.7 Sets	MC1.7.2	identify the members of a set	1	2-4	5
	MC1.7.3	identify null, finite and infinite sets	1	2-4	5
	MC1.7.4	identify subsets	1	2-4	5
MC2.0 OPERATIONS					
MC2.1 Addition	MC2.1.10	10 problems with thousands (2685+3421)	2	3	4
	After completing the above indicator the student will explain regrouping in terms of place value. (At appropriate skill level- I/D/M)				
MC2.2 Subtraction	MC2.2.2	the 100 basic facts in 10 minutes (100% accuracy)	2	3	4
	MC2.2.3	100 basic facts in 5 minutes (100% accuracy)	2	3-4	5
	MC2.2.7	10 problems with hundreds with regrouping (465-396)	2	3	4
	MC2.2.8	10 problems with thousands with regrouping (3527-1649)	2	3	4
	After completing the above indicators, the student will demonstrate understanding of subtraction by means of solving a self-devised problem. (At appropriate skill level - I/D/M)				

Goal/Competency	Performance Indicator	I	D	M
		(Grade Level)		
MC2.3 Multiplication	MC2.3.2 basic facts through 9 in 10 minutes (100% accuracy)	2	3	4
	MC2.3.3 basic facts through 9 in 5 minutes (100% accuracy)	2	3-4	5
	MC2.3.4 10 problems of ones times tens (5x36)	3	3	4
	MC2.3.5 10 problems of ones times hundreds (4x394)	3	4	5
	MC2.3.6 10 problems with tens times tens (46x53)	4	5	5
	MC2.3.7 10 problems with tens times hundreds (26x487)	4	5	6
	MC2.3.8 10 problems of hundreds times hundreds (266x394)	4	5	6
	After completing each of the above indicators, the student will demonstrate understanding of multiplication by means of solving a self-devised problem. (At appropriate skill level - I/D/M)			
MC2.4 Division	MC2.4.1 90 basic facts in 10 minutes (100% accuracy)	3	4	5
	MC2.4.2 10 problems with tens/ones without remainders	3	4	5
	MC2.4.3 10 problems with tens/ones with remainders (55/6)	3	4	5
	MC2.4.4 10 problems with hundreds/ones without remainders (368/4)	3	4	5
	MC2.4.5 10 problems with hundreds/ones with remainders	3	4	5
	MC2.4.6 10 problems with hundreds/tens without remainders	4	5	6
	MC2.4.7 10 problems with hundreds/tens with remainders (485/26)	4	5	6
	MC2.4.8 10 problems with thousands/tens (3695/25)	4	5	6
	After completing each of the above indicators, the student will demonstrate understanding of division by means of solving a self-devised problem. (At appropriate skill level I/D/M)			
MC4.0 FRACTIONS				
MC4.3 Equivalent fractions	MC4.3.1 identify the relationship of 10 pairs of fractions by using the sumbols =, < , >	4	5-6	-
MC4.4 Simplest form of fractions	MC4.1.1 reduce 10 pairs of proper fractions to simplest terms	4	5-6	-
MC4.7 Addition of fractions	MC4.7.1 add 10 pairs of fractions with common denominators	3	3	4
	MC4.7.2 add 10 pairs of fractions with unlike denominators	4	5	6
	MC4.7.3 add 10 pairs of fractions presented as mixed numerals	4	5	6

Goal/Competency	Performance Indicator		I	D	M
			(Grade Level)		
MC4.8 Subtraction of fractions	MC4.8.1	subtract 10 pairs of fractions with common denominators	3	4	5
	MC4.8.2	subtract 10 pairs of fractions with unlike denominators	4	5	6
	After completing each of the above indicators, the student will demonstrate the operations with fractions in a problem devised by the student. (At appropriate skill level-I/D/M)				
MC5.0 PLACE VALUE AND DECIMAL NUMBERS					
MC5.2 Place value to 100	MC5.2.1	identify the number of hundreds, tens, and ones in 10 three digit numbers (312-3 hundreds, 1 ten, 2 ones)	2	3	4
	MC5.2.2	write the numeral representing 10 numbers given the number of hundreds, tens, and ones (2 hundreds, 5 tens, 8 ones - 258)	2	3	4
MC5.3 Place value to 100,000	MC5.3.1	identify place value and write numeral to the 100,000	3	4	5
MC5.4 Place value (tenths, hundredths, thousanths)	MC5.4.1	identify the number of tenths and hundredths in 10 decimal numbers (.37 - 3 tenths, 7 hundredths)	4	5	6
	MC5.4.2	write the decimal number for 10 numbers given the number of tenths and hundredths (8 tenths, 5 hundredths - .85)	4	5	6
MC5.5 Rounding	MC5.5.1	round 10 whole numbers less than 100 to the nearest 10 (87-90)	2	3	4
	MC5.5.2	round 10 whole numbers less than 1000 to the nearest 10 and the nearest 100 (782-780,800)	3	4	5
	MC5.5.3	round 10 whole numbers greater than 1000 to the nearest 10, 100, 1000, 10000 (2372 - 2370, 2400, 2000)	4	5	6
	MC5.5.4	round 10 decimal numbers involving tenths to the nearest integer (.7 to 1, 2.6 to 3)	4	5	6
	MC5.5.5	round 10 decimal numbers (involving hundredths) to the tenth (.76 to .80)	4	5	6
MC5.6 Decimals and fractions	MC5.6.1	convert 10 fractions (denominators in power of 10) to equivalent decimal (1/10 to .1; 3/100 to .03...)	4	5	6
	MC5.6.2	change 10 simple fractions to decimal form (1/2, 2/5, 1/3, 3/4)	4	5	6

Goal/Competency		Performance Indicator		I (Grade Level)	D (Grade Level)	M (Grade Level)
		MC5.6.4	convert 10 decimals (using tenths and hundredths) to fractional form (.1 to 1/10; .25 to 25/100 to 1/4)	4	5	6
MC5.7	Operations-power of 10	MC5.7.1	multiply and divide 10 numbers by 10, 100, 1000 (3x10, 3x100, 3x1000, 8.21x 10, 8.21x100, etc...)	4	5	6
MC8.0	NUMBER PRINCIPLES					
MC8.1	Commutative Property	MC8.1.1	rewrite 5 simple addition equations by applying the commutative property (3+8=8+3)	3	4-6	
		MC8.1.2	rewrite 5 simple equations involving multiplication by applying the commutative property (8x4=4x8)	3	4-6	
MC8.2	Associative Property	MC8.2.1	rewrite 5 simple addition equations (with more than two addends) by applying the associative property (3+5)+2=3+(5+2)	3	4-6	
		MC8.2.2	rewrite 5 simple equations (involving multiplication) by using the associative property (3x5)x7=3x (5x7)	3	4-6	
MC8.4	Identify property	MC8.4.1	explain or define the properties of zero (additive identify) (6+0=6) (0+9=9)	2	3-6	
		MC8.4.2	explain or define the properties of one (multiplicative identify) (8x1=8 1x4=4)	3	4-6	
		After completing each of the above indicators, the student will demonstrate the operations with properties with a self-devised problem. (At appropriate skill level - I/D/M)				
MC9.0	GEOMETRY	MC9.1.2	identify closed and open curves from a set of curves (100% accuracy)	1	2-3	4
MC9.1	Geometric shapes	MC9.1.3	identify a cube, a sphere, and a rectangular solid from a set of geometric solids (100% accuracy)	2	3-4	5
		MC9.1.4	identify a cone, a pyramid, and a cylinder from a set of of geometric solids (100% accuracy)	4	5-6	-

Goal/Competency	Performance Indicator	I	D	M
		(Grade Level)		
	The Student Will			
MC9.2 Geometric vocabulary	MC9.2.1 give examples of point, line, plane, curve, and line segment	3	4-6	6
	MC9.2.2 give examples of ray, parallel lines, angels, regions, polygons, bisector, and intersection	4	5-6	
	MC9.2.3 match 10 pairs of congruent figures from a random arrangement of the figures (100% accuracy)	4	5	6
	MC9.2.4 match 5 pairs of similar figures from a random arrangement of the figures (100% accuracy)	4	5	6
	MC9.2.5 identify parallel, perpendicular, and intersecting lines from 10 examples (100% accuracy)	4	5	6
MC9.3 Geometric drawings and constructions	MC9.3.2 draw a point, parallel lines, intersecting lines, perpendicular lines, a line segment, and angles	4	5	6
	MC9.3.3 draw a model of a cube, rectangular solid, and a sphere	4	5-6	
	After completing each of the indicators above, the student will demonstrate the operation or concept in a self-devised example. (At appropriate skill level-I/D/M)			

PROBLEM SOLVING (MP)

Goal/Competency	Performance Indicator (The Student Will)		I	D	M
			(Grade Level)		
MP1.0 IDENTIFICATION					
MP1.1 Recognize and define the problem	MP1.1.2	underline the instructions in 5 given simulations lacking formal questions	1	2-3	4
	MP1.1.3	identify the appropriate label being requested in 5 simulation problems	2	2-3	4
	MP1.1.4	restate the problem (given 5 simulation problems) accurately in his own words.	2	3-4	5
MP1.2 Identify the process needed to solve a problem	MP1.2.1	indicate the basic operation required to solve each of 5 simulation problems	1	2-5	6
	MP1.2.2	identify the problems requiring secondary operations (5 simulation problems)	3	4-5	6
	MP1.2.3	identify the primary and secondary operations necessary to solve 5 simulation problems requiring these operations	3	4-5	6
MP2.0 COLLECT, ORGANIZE, AND PRESENT DATA					
MP2.1 Collect data	MP2.1.1	underline the information needed to solve each of 5 given simulation problems	1	2-5	6
	MP2.1.2	identify those problems from a given set of five, which contain sufficient data and information needed to solve the problem	4	5	6
MP2.2 Organize data	MP2.2.1	organize the data into a usable form (lists, graphs, tables, - five problems)	1	2-6	
MP2.3 Present data	MP2.3.1	present data from 5 simulation problems in computable form	1	2-6	
MP3.0 SOLVE PROBLEM					
MP3.1 Compute and label	MP3.1.1	determine and appropriately label the solution to 5 given simulation problems	1	2-6	

Goal/Competency	Performance Indicator	I	D	M (Grade Level)
MP4.0 INTERPRET ANSWER	The Student Will			
	MP4.1.1 summarize the method used to obtain each of the answers to 5 simulation problems	2	3-6	
	MP4.1.2 interpret the results (MP4.1.1) in terms of the statement of each of the 5 simulation problems	2	3-6	
	****SIMULATION PROBLEMS MUST BE APPROPRIATE FOR GRADE LEVEL***			

MEASUREMENT (MM)

Goal/Competency		Performance Indicator		I (Grade Level)	D (Grade Level)	M (Grade Level)
MM1.0 TIME		The Student Will				
	MM1.3 Telling time	MM1.3.1	state the correct time when shown 10 clock faces			
			to the nearest 5 minutes	3	3	4
			to the nearest minute	3	4	5
	MM1.4 Elapsed time	MM1.4.1	compute elapsed time to the nearest			
			minute	2	3	4
			second	3	4	5
MM2.0 MONEY						
	MM2.2 Value of coins (100% accuracy)	MM2.2.2	identify the number of nickles in a dime, quarter, half dollar, and dollar	2	3	4
	MM2.3 Basic operations	MM2.3.1	use the basic number operations to compute the answer to 10 miney problems			
			addition	2	3	4
			subtraction	2	3	4
			multiplication	3	4	5
			division	4	5	6
MM3.0 LENGTH		MM3.1.4	compute differences in length			
			to the nearest whole unit	2	3	4
			to the nearest 1/2 unit	2	3-4	5
			to other fractional estimates	3	4-5	6
		MM3.1.5	Use appropriate units to measure varying lengths (foot versus mile; mm versus km)	1	2-4	5
		MM3.1.6	use map scales to compute distances	3	4	5
MM4.0 VOLUME (SOLID OBJECT						
	MM4.1 Comparative Volume	MM4.1.1	compare objects using terminology such as more than, less than, full, empty, most, least....	1	2-3	4

Goal/Competency		Performance Indicator The Student Will	I	D	M
			(Grade Level)		
MM5.0 CAPACITY (Liquid filling)					
MM5.1 Comparative terms	MM5.1.1	identify containers by their capacities (ml, cl, l, kl) by using calibrated cups	2	3-4	5
	MM5.1.2	convert the capacity of 5 containers from liters to multiples of liters	3	4-6	
MM6.0 TEMPERATURE					
MM6.1 Determining temperature (celcius and farenheit)	MM6.1.1	read the temperature from 3 model thermometers	3	3	4
	MM6.1.2	describe the readings from 3 model thermometers in comparative terms (cool, warm, hot,..) and place the models in ascending order according to temperature	3	3	4
	MM6.1.3	mark thermometers with different scales for boiling and freezing points of pure water	4	5	6
	MM6.1.4	read the temperature from two model thermometers and compute the difference (5 problems)	3	3	4

COMPUTATION AND CONCEPTS (MC)

Goal/Competency	Performance Indicator	I	D	M
		(Grade Level)		
MC1.0 NUMERATION	The student will			
MC1.5 Roman numerals	MC1.5.1 read and write standard Roman numerals (I V X L C M)	4	5	6
MC1.6 Symbols	MC1.6.1 identify (orally and written) the symbols of arithmetic (+ - x ÷ = ≠)	1	2-4	5
	MC1.6.2 demonstrate the use of each symbol in a self-devised problem	1	2-4	5
MC1.7 Sets	MC1.7.2 identify the members of a set	1	2-4	5
	MC1.7.3 identify null, finite and infinite sets	1	2-4	5
	MC1.7.4 identify subsets	1	2-4	5
MC2.0 OPERATIONS	The student will compute			
MC2.2 Subtraction	MC2.2.3 100 basic facts in 5 minutes (100% accuracy)	2	3-4	5
	After completing the above indicator, the student will demonstrate understanding of subtraction by means of solving a self-devised problem. (At appropriate skill level-I/D/M)			
MC2.3 Multiplication	MC2.3.3 basic facts through 9 in 5 minutes (100% accuracy)	2	3-4	5
	MC2.3.5 10 problems of ones times hundreds (4 x 394)	3	4	5
	MC2.3.6 10 problems with tens times tens (46 x 53)	4	5	5
	MC2.3.7 10 problems with tens times hundreds (26 x 487)	4	5	6
	MC2.3.8 10 problems of hundreds times hundreds (266 x 394)	4	5	6
	After completing each of the above indicators, the student will demonstrate understanding of multiplication by means of solving a self-devised problem. (At appropriate skill level-I/D/M)			

Goal/Competency	Performance Indicator	I	D	M
		(Grade Level)		
MC2.4 Division	The student will compute			
	MC2.4.1 90 basic facts in 10 minutes (100% accuracy)	3	4	5
	MC2.4.2 10 problems with tens/ones without remainders (36/2)	3	4	5
	MC2.4.3 10 problems with tens/ones with remainders (55/6)	3	4	5
	MC2.4.4 10 problems with hundreds/ones without remainders (368/4)	3	4	5
	MC2.4.4 10 problems with hundreds/ones without remainders (368/4)	3	4	5
	MC2.4.5 10 problems with hundreds/ones with remainders (562/5)	3	4	5
	MC2.4.6 10 problems with hundreds/tens without remainders (360/24)	4	5	6
	MC2.4.7 10 problems with hundreds/tens with remainders (485/26)	4	5	6
	MC2.4.8 10 problems with thousands/tens (3695/25)	4	5	6
	MC2.4.9 10 problems with thousands/hundreds (4829/256)	5	6	-
	MC2.4.11 10 problems expressing the remainders as fractions (25/4=6 1/4)	5	6	6
	After completing each of the above indicators, the student will demonstrate understanding of division by means of solving a self-devised problem. (At appropriate skill level-I/D/M)			
MC3.0 NUMBER THEORY	The student will identify and list			
MC3.1 Common multiples	MC3.1.1 common multiples when given two or more sets of multiples	5	6	-
MC3.2 Least common multiple	MC3.2.1 the least common multiple of any two integers less than 100	5	6	-
MC3.3 Factors	MC3.3.1 80% of the factors in each of 10 composite numbers	5	6	-
	MC3.3.2 all factors of a given number less than 50	5	6	-
MC3.4 Common factors	MC3.4.1 80% of the common factors in each of 10 pairs of composite numbers	5	6	-

Goal/Competency	Performance Indicator		I	D	M
			(Grade Level)		
MC3.5 Greatest common factor	MC3.5.1	the greatest common factor of any two integers less than 100	5	6	-
MC3.6 Prime factors	MC3.6.1	the 10 prime numbers from a list of 20 numbers, ten of which are prime	5	6	-
	MC3.6.2	prime and composite numbers from a given list of numbers	5	6	-
MC3.7 Complete factorization	MC3.7.1	factor trees from a given list of ten numbers	5	6	-
MC4.0 FRACTIONS		The student will			
MC4.3 Equivalent fractions	MC4.3.1	identify the relationship of 10 pairs of fractions by using the symbols =, $<$, $>$	4	5-6	-
MC4.4 Simplest form of fractions	MC4.4.1	reduce 10 pairs of proper fractions to simplest terms	4	5-6	-
MC4.5 Common denominator	MC4.5.1	find the common denominator for each pair of 10 given pairs of fractions with unlike denominators	5	6	-
MC4.6 Mixed numbers and improper fractions	MC4.6.1	change 10 pairs of mixed numbers to improper fractions	5	6	-
	MC4.6.2	change 10 pairs of improper fractions to mixed numbers	5	6	-
MC4.7 Addition of fractions		The student will			
	MC4.7.2	add 10 pairs of fractions with unlike denominators	4	5	6
	MC4.7.3	add 10 pairs of fractions presented as mixed numerals			
MC4.8 Subtraction of fractions	MC4.8.1	subtract 10 pairs of fractions with common denominators	3	4	5
	MC4.8.2	subtract 10 pairs of fractions with unlike denominators	4	5	6
	MC4.8.3	subtract 10 pairs of fractions presented as mixed numerals	5	5	6
		After completing each of the above indicators, the student will demonstrate the operations with fractions in a problem devised by the student. (At appropriate skill leven-I/D/M)			

Goal/Competency		Performance Indicator		I	D	M
				(Grade Level)		
MC5.0	PLACE VALUE AND DECIMAL NUMBERS					
MC5.3	Place value to 100,000	MC5.3.1	identify place value and write numeral to the 100,000	3	4	5
MC5.4	Place value (tenths, hundredths, thousanths..)	MC5.4.1	identify the number of tenths and hundredths in 10 decimal numbers (.37 - 3 tenths, 7 hundredths)	4	5	6
		MC5.4.2	write the decimal number for 10 numbers given the number of tenths and hundredths (8 tenths, 5 hundredths - .85)	4	5	6
		MC5.4.3	read 10 decimal numbers (.5, .26, .31, - 7029)	5	6	
		MC5.4.4	write 10 decimal numbers presented orally	5	6	
			The Student Will			
MC5.5	Rounding	MC5.5.2	round 10 whole numbers less than 1000 to the nearest 10 and the nearest 100 (782 - 780, 800)	3	4	5
		MC5.5.3	round 10 whole numbers greater than 1000 to the nearest 10, 100, 1000, 10000 (2372 - 2370, 2400, 2000)	4	5	6
		MC5.5.4	round 10 decimal numbers involving tenths to the nearest integer (.7 to 1, 2.6 to 3)	4	5	6
		MC5.5.5	round 10 decimal numbers (involving hundredths) to the nearest tenth. (.76 to .80)	4	5	6
		MC5.5.6	round 10 decimals less than .9 to the nearest tenth, (.372 to .4, .37, .370)	5	6	
MC5.6	Decimals and fractions	MC5.6.1	convert 10 fractions (denominators in power of 10) to equivalent decimal (1/10 to .1; 3/100 to .03...)	4	5	6
		MC5.6.2	change 10 simple fractions to decimal form (1/2, 2/5, 1/3, 3/4)	4	5	6
		MC5.6.3	change 10 fractions to decimal form (7/8, 15/16, 5/9)	5	6	
		MC5.6.4	convert 10 decimals (using tenths and hundredths) to fractional form (.1 to 1/10; .25 to 25/100 to 1/4)	4	5	6
MC5.7	Operations-power of	MC5.7.1	multiply and divide 10 numbers by 10, 100, 1000 (3 x 10, 3 x 100, 3 x 1000; 8.21 x 100 etc...)	4	5	6
		MC5.7.2	multiply and divide 10 numbers by .1, .01, .001			

Goal/Competency	Performance Indicator	I (Grade Level)	D (Grade Level)	M (Grade Level)
	The Student Will Compute			
MC5.8 Basic operations	MC5.8.1 10 addition problems using decimals to thousandths	5	6	
	MC5.8.2 10 subtraction problems using decimals to thousandths	5	6	
	MC5.8.3 10 multiplication problems using decimals to thousandths	5	6	
	MC5.8.4 10 division problems using decimals to thousandths	5	6	
	After completing each of the above indicators, the student will demonstrate the operation with decimals in a self-devised problem. (At appropriate skill level - I/D/M.)			
MC8.0 NUMBER PRINCIPLES				
MC8.1 Commutative Property	MC8.1.1 rewrite 5 simple addition equations by applying the commutative property (3 + 8 = 8 + 3)	3	4-6	
	MC8.1.2 rewrite 5 simple equations involving multiplication by using the commutative property (8x4 = 4x8)	3	4-6	
MC8.2 Associative Property	MC8.2.1 rewrite 5 simple addition equations (with more than two addends) by applying the associative property (3+5)+2=3+(5+2)	3	4-6	
	MC8.2.2 rewrite 5 simple equations (involving multiplication) by using the associative property (3x5)x7 = 3x(5x7)	3	4-6	
MC8.3 Distributive property	MC8.3.1 rewrite 5 equations by applying the distributive property 6 x (3+4)=6 x 3 + 6 x 4	5	6	
MC8.4 Identify property	MC8.4.1 explain or define the properties of zero (additive identify) (6 + 0 = 6 0 + 9 = 9)	2	3-6	
	MC8.4.2 explain or define the properties of one (multiplicative identity (8x1=8 1x4=4)	3	4-6	
	After completing each of the above indicators, the student will demonstrate the operations with properties with a self-devised problem. (At appropriate skill level)			

Goal/Competency		Performance Indicator	I	D	M
			(Grade Level)		
		The Student Will			
MC9.0 GEOMETRY					
MC9.1	Geometric shapes	MC9.1.3 identify a cube, a sphere, and a rectangular solid from a a set of geometric solids (100% accuracy)	2	3-4	5
		MC9.1.3 identify a cone, a pyramid, and a cylinder from a set of geometric solids (100% accuracy)	4	5-6	
MC9.2	Geometric Vocabulary	MC9.2.1 give examples of point, line, plane, curve, and line segment	3	4-6	
		MC9.2.2 give examples of ray, parallel lines, angles, regions, polygons, bisector, and intersection)	4	5-6	
		MC9.2.3 match 10 pairs of congruent figures from a random arrangement of the figures (100% accuracy)	4	5	6
		MC9.2.4 match 5 pairs of similar figures from a random arrangement of the figures (100% accuracy)	4	5	6
		MC9.2.5 identify parallel, perpendicular, and intersecting lines from 10 examples (100% accuracy)	4	5	6
MC9.3	Geometric drawings and constructions	MC9.3.2 draw a point, parallel lines intersecting lines, perpendicular lines, a line segment, and angles	3	4-5	6
		MC9.3.3 draw a model of a cube, rectangular solid, and a sphere	4	5-6	
		MC9.3.4 measure, with a protractor, each of 5 given angles to the nearest degree	5	6	
		MC9.3.5 use a compass to construct circles with radii of , 4, and 6 inches	5	6	
		MC9.3.6 copy a given angle using a compass and a ruler	5	6	
		MC9.3.7 construct perpendicular lines with a ruler and compass	5	6	
		MC9.3.8 bisect an angle using a ruler and compass	5	6	
		After completing each of the indicators above, the student will demonstrate the operation or concept in a self-devised example. (At appropriate skill level-I/D/M)			

PROBLEM SOLVING (MP)

Goal/Competency	Performance Indicator		I (Grade Level)	D (Grade Level)	M (Grade Level)
MP1.0 IDENTIFICATION					
MP1.1 Recognize and define the problem	MP1.1.4	restate the problem (given 5 simulation problems) accurately in his own words	2	3-4	5
MP1.2 Identify the process needed to solve a problem	MP1.2.1	indicate the basic operation required to solve each of 5 simulation problems	1	2-5	6
	MP1.2.2	identify the problems requiring secondary operations (5 simulation problems)	3	4-5	6
	MP1.2.3	identify the primary and secondary operations necessary to solve 5 simulation problems requiring these operations	3	4-5	6
MP2.0 COLLECT, ORGANIZE, AND PRESENT DATA					
MP2.1 Collect data	MP2.1.1	underline the information needed to solve each of 5 given simulation problems	1	2-5	6
	MP2.1.2	identify those problmes from a given set of five, which sufficient data and information needed to solve the problem	4	5	6
MP2.2 Organize data	MP2.2.1	organize the data into a usable form (lists, graphs, tables, = five problems)	1	2-6	
MP2.3 Present data	MP2.3.1	present data from 5 simulation problems in computable form	2	2-6	
MP3.0 SOLVE PROBLEM					
MP3.1 Compute and label	MP3.1.1	determine and appropriately label the solution to 5 given simulation problems	1	2-6	
MP4.0 INTERPRET ANSWER	MP4.1.1	summarize the method used to obtain each of the answers to 5 simulation problems	2	3-6	
	MP4.1.2	interpret the results (MP4.1.1) in terms of the statement of each of the 5 simulation problems	2	3-6	

SIMULATION PROBLEMS MUST BE APPROPRIATE FOR GRADE LEVEL

MEASUREMENT (MM)

Goal/Competency	Performance Indicator		I	D	M
			(Grade Level)		
MM1.0 TIME		The Student Will			
MM1.3 Telling time	MM1.3.1	state the correct time when shown 10 clock faces to the nearest minute	3	4	5
MM1.4 Elapsed time	MM1.4.1	compute elapsed time to the nearest second	3	4	5
MM2.0 MONEY					
MM2.3 Basic operations	MM2.3.1	use the basic number operations to compute the answer to 10 money problems			
		multiplication	3	4	5
		division	4	5	6
MM3.0 LENGTH					
MM3.1 Comparative length	MM3.1.4	compute differences in length			
		to the nearest 1/2 unit	2	3-4	5
		to other fractional estimates	3	4-5	6
	MM3.1.5	use appropriate units to measure varying lengths (foot versus mile; mm versus km)	1	2-4	5
	MM3.1.6	will use map scales to compute distances	3	4	5
		The Student Will			
MM3.2 Perimeter and area	MM3.2.1	compute the perimeters of 5 given polygons	5	6	
	MM3.2.2	compute the circumference of 5 circles	5	6	
MM5.0 CAPACITY (liquid filling)					
MM5.1 Comparative terms	MM5.1.1	identify containers by their capacities (ml, cl, l, kl) by using calibrated cups	2	3-4	5
	MM5.1.2	convert the capacity of 5 containers from liters to multiples of liters	3	4-6	
MM6.0 TEMPERATURE					
MM6.1 Determining temperature (Celcius & farenheit)	MM6.1.3	mark thermometers with different scales for boiling and freezing points of pure water	4	5	6

SIXTH GRADE

COMPUTATION AND CONCEPTS (MC)

Goal/Competency	Performance Indicator	I	D	M (Grade Level)
MC1.0 NUMERATION	The Student will			
MC1.5 Roman numerals	MC1.5.1 read and write standard Roman numerals (I V X L C M)	4	5	6
MC2.0 OPERATIONS	The student will compute			
MC2.3 Multiplication	MC2.3.7 10 problems with tens times hundreds (26 x 487)	4	5	6
	MC2.3.8 10 problems of hundreds times hundreds (266 x 394)	4	5	6
	After completing each of the above indicators, the student will demonstrate understanding of multiplication by means of solving a self-devised problem. (At appropriate skill level-I/D/M)			
MC2.4 Division	MC2.4.6 10 problems with hundreds/tens without remainders (360/24)	4	5	6
	MC2.4.7 10 problems with hundreds/tens with remainders (485/26)	4	5	6
	MC2.4.8 10 problems with thousands/tens (3695/25)	4	5	6
	MC2.4.9 10 problems with thousands/hundreds (4829/256)	5	6	-
	MC2.4.10 10 problems where divisor is a whole number and dividend a decimal number 256.32/21)	6	-	-
	MC2.4.11 10 problems expressing the remainders as fractions (25/4=6 1/4)	5	6	6
	After completing each of the above indicators, the student will demonstrate understanding of division by means of solving a self-devised problem. (At appropriate skill level-I/D/M)			
MC3.0 NUMBER THEORY	The student will identify and list			
MC3.1 Common Multiples	MC3.1.1 common multiples when given two or more sets of multiples	5	6	-
MC3.2 Least Common Multiples	MC3.2.1 the least common multiple of any two integers less than 100	5	6	-
MC3.3 Factors	MC3.3.1 80% of the factors in each of 10 composite numbers	5	6	-
	MC3.3.2 all factors of a given number less than 50	5	6	-

Goal/Competency		Performance Indicator	I	D	M
			(Grade Level)		
MC3.4 Common Factors	MC3.4.1	80% of the common factors in each of 10 pairs of composite numbers	5	6	-
MC3.5 Greatest Common Factors	MC3.5.1	the greatest common factor of any two integers less than 100	5	6	-
MC3.6 Prime Factors	MC3.6.1	the 10 prime numbers from a list of 20 numbers, ten of which are prime	5	6	-
	MC3.6.2	prime and composite numbers from a given list of numbers	5	6	-
MC3.7 Complete Factorization	MC3.7.1	factor trees from a given list of ten numbers	5	6	-
MC4.0 FRACTIONS					
MC4.3 Equivalent fractions	MC4.3.1	identify the relationship of 10 pairs of fractions by using the symbols =, <, >	4	5-6	-
MC4.4 Simplest form fractions	MC4.4.1	reduce 10 pairs of proper fractions to simplest terms	4	56	-
MC4.5 Common denominator	MC4.5.1	find the common denominator for each pair of 10 given pairs of fractions with unlike denominators	5	6	-
MC4.6 Mixed numbers and improper fractions	MC4.6.1	change 10 pairs of mixed numbers to improper fractions	5	6	-
	MC4.6.2	change 10 pairs of improper fractiosn to mixed numbers	5	6	-
MC4.7 Addition of fractions		The student will			
	MC4.7.2	add 10 pairs of fractions with unlike denominators	4	5	6
	MC4.7.3	add 10 pairs of fractions presented as mixed numerals	4	5	6

Goal/Competency	Performance Indicator		I	D	M
			(Grade Level)		
MC4.8 Subtraction of fractions	MC4.8.2	subtract 10 pairs of fractions with unlike denominators	4	5	6
	MC4.8.3	subtract 10 pairs of fractions presented as mixed numerals	5	5	6
MC4.9 Multiplication of fractions	MC4.9.1	multiply I0 pairs of proper fractiosn (2/3 x 1/4)	6	-	-
	MC4.9.2	multiply 10 pairs of mixed numerals (2 1/4 x 3 1/5)	6	-	-
MC4.10 Division of fractions	MC4,10.1	divide 10 pairs of proper fractiosn (1/2 - 1/4)	6	-	-
	After completing each of the above indicators, the student will demonstrate the operations with fractions in a problem devised by the student. (At appropriate skill level-I/D/M)				
MC5.0 PLACE VALUE AND DECIMAL NUMBERS					
MC5.4 Place value (tenths, hundredths, thousandths...)	MC5.4.1	identify the number of tenths and hundredths in 10 decimal numbers (.37 = 3 tenths, 7 hundredths)	4	5	6
	MC5.4.2	write the decimal number for 10 numbers given the number of tenths and hundredths (8 tenths, 5 hundredths = .85)	4	5	6
	MC5.4.3	read 10 decimal numbers (.5, .26, .318, .7029)	5	6	-
	MC5.4.4	write 10 decimal numbers presented orally			
MC5.5 Rounding	The student will				
	MC5.5.3	round 10 whole numbers greater than 1000 to the nearest 10, 100, 1000, 10000 (2372-2370, 2400, 2000)	4	5	6
	MC5.5.4	round 10 decimal numbers involving tenths to the nearest integer (.7 to 1, 2.6 to 3)	4	5	6
	MC5.5.5	round 10 decimal numbers (involving hundredths) to the tenth (.76 to .80)	4	5	6
	MC5.5.6	round 10 decimals less than .9 to the nearest tenth, hundredth, thousandth (.372 to .4, .37, .370)	5	6	-
MC5.6 Decimals and fractions	MC5.6.1	convert 10 fractions (denominators in power of 10) to equivalent decimal (1/10 to .1; 3/100 to .03...)	4	5	6
	MC5.6.2	change 10 simple fractions to decimal form (1/2, 2/5, 1/3, 3/4)	4	5	6

Goal/Competency	Performance Indicator	I	D	M
		(Grade Level)		
	MC5.6.3 change 10 fractions to decimal form (7/8, 15/16, 5/9)	5	6	-
	MC5.6.4 convert 10 decimals (using tenths and hundredths) to fractional form (.1 to 1/10; .25 to 25/100 to 1/4)	4	5	6
MC5.7 Operations-power of 10	MC5.7.1 multiply and divide 10 numbers by 10, 100, 1000 (3 x 10, 3 x 100, 3 x 1000, 8.21 x 10, 8.21 x 100 etc.)	4	5	6
	MC5.7.2 Multiply and divide 10 numbers by .1, .01, .001	5	6	-
MC5.8 Basic operations	The student will compute			
	MC5.8.1 10 addition problems using decimals to thousandths	5	6	-
	MC5.8.2 10 subtraction problems using decimals to thousandths	5	6	-
	MC5.8.3 10 multiplication problems using decimals to thousandths	5	6	-
	MC5.8.4 10 division problems using decimals to thousandths	5	6	-
	MC5.8.5 10 money problems involving the basic operations	5	6	-
	After completing each of the above indicators, the student will demonstrate the operations with decimals in a self-devised problem. (At appropriate skill level-I/D/M)			
MC6.0 PERCENTAGES	The student will			
MC6.1 Percentage symbol	MC6.1.1 identify the percentage symbol from a given list of 10 values (50, 45%, 20, 20%, 89%, 53...)	6	-	-
	MC6.1.2 write the % symbol when orally given 10 statements involving the symbol (thirty-three percent, 33%)	6	-	-
MC6.2 Decimals and fractions to percentages	MC6.2.1 change each of 10 fractions to percentages	6	-	-
	MC6.2.2 change each of 10 decimals to percentages	6	-	-
	After completing each of the above indicators, the student will demonstrate the operations with percentages in a self-devised problem. (At appropriate skill level-I/D/M)			

Goal/Competency		Performance Indicator	I	D	M
			(Grade Level)		
MC7.0 STATISTICAL PROBLEMS					
MC7.1	MC7.1.1	compute the average of five 2 digit whole numbers (24+35+46+37+34)/5	6	-	-
	MC7.1.2	demonstrate the meaning of average by computing the results of a self-devised problem and interpreting the process and/or result.	6	-	-
MC8.0 NUMBER PRINCIPLES		The student will			
MC8.1 Commutative Property	MC8.1.1	rewrite 5 simple addition equations by applying the commutative property (3 + 8 = 8 + 3)	3	4-6	-
	MC8.1.2	rewrite 5 simple equations involving multiplication by using the commutative property (8x4=4x8)	3	4-6	-
MC8.2 Associative Property	MC8.2.1	rewrite 5 simple addition equations (with more than two addends) by applying the associative property (3+5)+2=3+(5+2)	3	4-6	-
	MC8.2.2	rewrite 5 simple equations (involving multiplication) by using the associative property (3x5)x7=3x(5x7)	3	4-6	-
MC8.3 Distributive property	MC8.3.1	rewrite 5 equations by applying the distributive property 6x(3+4)=6x3+6x4	5	6	-
MC8.4 Identify property	MC8.4.1	explain or define the properties of zero (additive identify) (6+0=6) (0+9=9)	2	3-6	-
	MC8.4.2	explain or define the properties of one (multiplicative identity) (8x1=8 1x4=4)	3	4-6	-
		After completing each of the above indicators, the student will demonstate the operations with properties with a self-devised problem. (At appropriate skill level-I/D/M)			
MC9.0 GEOMETRY					
MC9.1 Geometric shapes	MC9.1.4	identify a cone, a pyramid, and a cylinder from a set of geometric solids (100% accuracy)	4	5-6	-

Goal/Competency		Performance Indicator	I (Grade Level)	D (Grade Level)	M (Grade Level)
MC9.2 Geometric vocabulary		The student will			
	MC9.2.1	give examples of point, line, plane, curve, and line segment	3	4-6	-
	MC9.2.2	give examples of ray, parallel lines, angles, regions polygons, bisector, and intersection	4	5-6	-
	MC9.2.3	match 10 pairs of congruent figures from a random arrangement of the figures (100% accuracy)	4	5	6
	MC9.2.4	match 5 pairs of similar figures from a random arrangement of the figures (100% accuracy)	4	5	6
	MC9.2.5	identify parallel, perpendicular, and intersecting lines from 10 examples (100% accuracy)	4	5	6
MC9.3 Geometric drawings and constructions	MC9.3.2	draw a point, parallel lines, intersecting lines, perpendicular lines, a line segment, or 4 angles	3	4-5	6
	MC9.3.3	draw a model of a cube, rectangular solid, and a sphere	4	5	6
	MC9.3.4	measure, with a protractor, each of 5 given angles to the nearest degree	5	6	-
	MC9.3.5	use a compass to construct circles with radii of 2, 4, and 6 inches	5	6	-
	MC9.3.6	copy a given angle using a compass and ruler	5	6	-
	MC9.3.7	construct perpendicular lines with a ruler and compass	5	6	-
	MC9.3.8	bisect an angle using a ruler and compass	5	6	-
		After completing each of the indicators above, the student will demonstrate the operation or concept in a self-devised example. (At appropriate skill level-I/D/M)			

PROBLEM SOLVING (MP)

Goal/Competency	Performance Indicator		I	D	M
			(Grade Level)		
MP1.0 IDENTIFICATION	The student will				
MP1.2 Identify the process needed to solve a problem	MP1.2.1	indicate the basic operation required to solve each of 5 simulation problems	1	2-5	6
	MP1.2.2	identify the problems requiring secondary operations (5 simulation problems)	3	4-5	6
	MC1.2.3	identify the primary and secondary operations necessary to solve 5 simulation problems requiring these operations	3	4-5	6
MP2.0 COLLECT, ORGANIZE AND PRESENT DATA					
MP2.1 Collect data	MP2.1.1	underline the information needed to solve each of 5 given simulation problems	1	2-5	6
	MP2.1.2	identify those problems from a given set of five, which contain sufficient data and information needed to solve tha problem	4	5	6
MP2.2 Organize data	MP2.2.1	organize the data into a usable form (lists, graphs, tables, - five problems)	1	2-6	-
MP2.3 Present data	MP2.3.1	present data from 5 simulation problems in computable form	1	2-6	-
MP3.0 SOLVE PROBLEM	The student will				
MP3.1 Compute and label	MP3.1.1	determine and appropriately label the solution to 5 given simulation problems	1	2-6	-
MP4.0 INTERPRET ANSWER					
	MP4.1.1	summarize the method used to obtain each of the answers to 5 simulation problems	2	3-6	-
	MP4.1.2	interpret the results (MP4.1.1) in terms of the statement of each of the 5 simulation problems			

*****SIMULATION PROBLEMS MUST BE APPROPRIATE FOR GRADE LEVEL***

MEASUREMENT (MM)

Goal/Competency	Performance Indicator		I	D	M
			(Grade Level)		
MM2.0 MONEY					
MM2.3 Basic operations	MM2.3.1	use the basic number operations to compute the answer to 10 money problems division	4	5	6
MM3.0 LENGTH	The student will				
MM3.1 Comparative length	MM3.1.4	compute differences in length to fractional estimates other than 1/2 unit (1/4, 1/8, 1/16...)	3	4-5	6
MM3.2 Perimeter and area	MM3.2.1	compute the perimeters of 5 given polygons	5	6	-
	MM3.2.2	compute the circumference of 5 circles	5	6	-
	MM3.2.3	compute the area of 5 triangles	6	-	-
	MM3.2.4	compute the area of 5 irregular rectangular planes	6	-	-
	MM3.2.5	compute the area of 5 circles	6	-	-
	MM3.2.6	compute the area of 5 parallelograms	6	-	-
	MM3.2.7	use the correct square units in reporting the areas computed for MM3.2	6	-	-
MM4.0 VOLUME (SOLID OBJECT)					
MM4.1 Comparative volume	MM4.1.2	compute the volume of rectangular solids using models and blocks	6	-	-
MM4.2 Standard units	MM4.2.1	compute volume of 5 objects using the cubic centimeter and its multiples	6	-	-
MM5.0 CAPACITY (Liquid filling)					
MM5.1 Comparative	MM5.1.2	convert the capacity of 5 containers from liters to multiples of liters	3	4-6	-
MM6.0 TEMPERATURE					
MM6.1 Determining temperature (celcius and farenheit)	MM6.1.3	mark the thermometers with different scales for boiling and freezing points of pure water	4	5	6